

**Work Order ID 122252**

Monday, July 14, 2014 1:54:07 PM

**\*122252\***

Page 1

Item ID: D3443-7

Revision ID:

Item Name: Tubing

Start Date: 7/14/14

Start Qty: 10.00 **\*10\***

Required Date: 7/14/14

Req'd Qty: 10.00 **\*10\***

Reference:

Approvals:

Process Plan: MLJDate: 14-07-14

Tooling:

Date:

Run

Start

**\*NS1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NS2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr	Revision Nbr								
D3443	Rev C								

100

**\*100\***

Brake NC

NC.BRAKE

0.00

DAS

28

9-89

NOV 04 2014

10X

Brake NC

Memo

0.00

1- Form as per Dwg D3443 using DT81172- Deburr per dwg D3443

DAS

30

9-89

10

110

**\*110\***

Small Fab

Small Fab

0.00

Memo

0.00

GRIND RAD PER DWG

DAS

30

9-89

DAS

36

9-89

14/11/05

NOV 04 2014

120

**\*120\***

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

DAS

38

9-89

NOV 05 2014

Nov 05 2014

10

PTOZ

DQA:

SAS

Date: 14/12/11

QA Closed:

Date: 14/12/10



## WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only 

Work Order:	Part No.:	NCR No.:	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Prod. Eng. Coor.	Rec/Store/Packaging	Engineering
122252	D3443-7	14-4435	Suspected Unapproved		X	Machining	Small Fab			Supplier	Quality

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	14.12.02	130	1	THRU HOLE IS ~ 0.50 FROM EDGE TO CTR. SHOULD BE 0.55	A.P.	DEVIATION IS ACCEPTABLE, LOADING ON PART OCCURS ON GROUND, FLIGHT LOADS ARE MINIMAL. NO EFFECT ON STRENGTH OF PART.	J.C.-L. 14/12/03		PD
Doc/Data						USE AS IS			
Equip/Tooling						ENSURE 9.78 DIM ON D3443-043 CAN BE MAINTAINED			
Handling/Pre									
Material									
Operator	✓			material was cut too short on opp stop 100					
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
Crushing	Countersink	Misaligned/off center	Positioned Wrong	
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	
Inspection Strip in Tube	Drawing	Misread		
Marks/Chatter	Drill Holes	Off-set		
Turning Sequence	Finish	Out of Calibration		
Wave/Twist in Tube	Fit/Function	Out of Sequence		



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. _____							

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General	Outside Dimensions	Pressure/Forced
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Power Loss/Surge	
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short		
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing		
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes		
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish		
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function		

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\*122252\*

Page 3

Item ID: D3443-7

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Tubing

Stop

\*NS2\*

Start Date: 7/14/14

Start Qty: 10.00

\*10\*

Cust Item ID:

Required Date: 7/14/14

Req'd Qty: 10.00

\*10\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

Identify as per dwg & Stock Location: WA002 0.00

\*160\*

Packaging

Packaging

Memo

0.00

10

600  
90  
SVA

DEC 05 2014

170

QC21- Final Inspection - Work Order Release

0.00

\*170\*

QC

Quality Control

Memo

0.00

14/12/98

DR-12-08

DQA:

Date:



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

## Work Order update only

# Picklist Print

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Page 1

Work Order ID: 122252

\*122252\*

Parent Item: D3443-7

\*D3443-7\*

Parent Item Name: Tubing

Start Date: 7/14/14

Required Date: 7/14/14

Start Qty: 10.00

Required Qty: 10.00

Comments: A05.11.14New issueEC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.750W.120		Purchased		No		100	f	0.0001	0.75	7.894737			
<b>*M304TR0.750W.120*</b> 304 ss round tube .750 x .120w													**
<b>DAS</b> <b>28</b> <b>9-89</b>													NOV 04 2014
<u>Location</u>				<u>Loc Qty</u>			<u>Loc Code</u>			<u>130071</u>			
MAT017				0.0001									
125656				0.0001									

DQA:

Date:

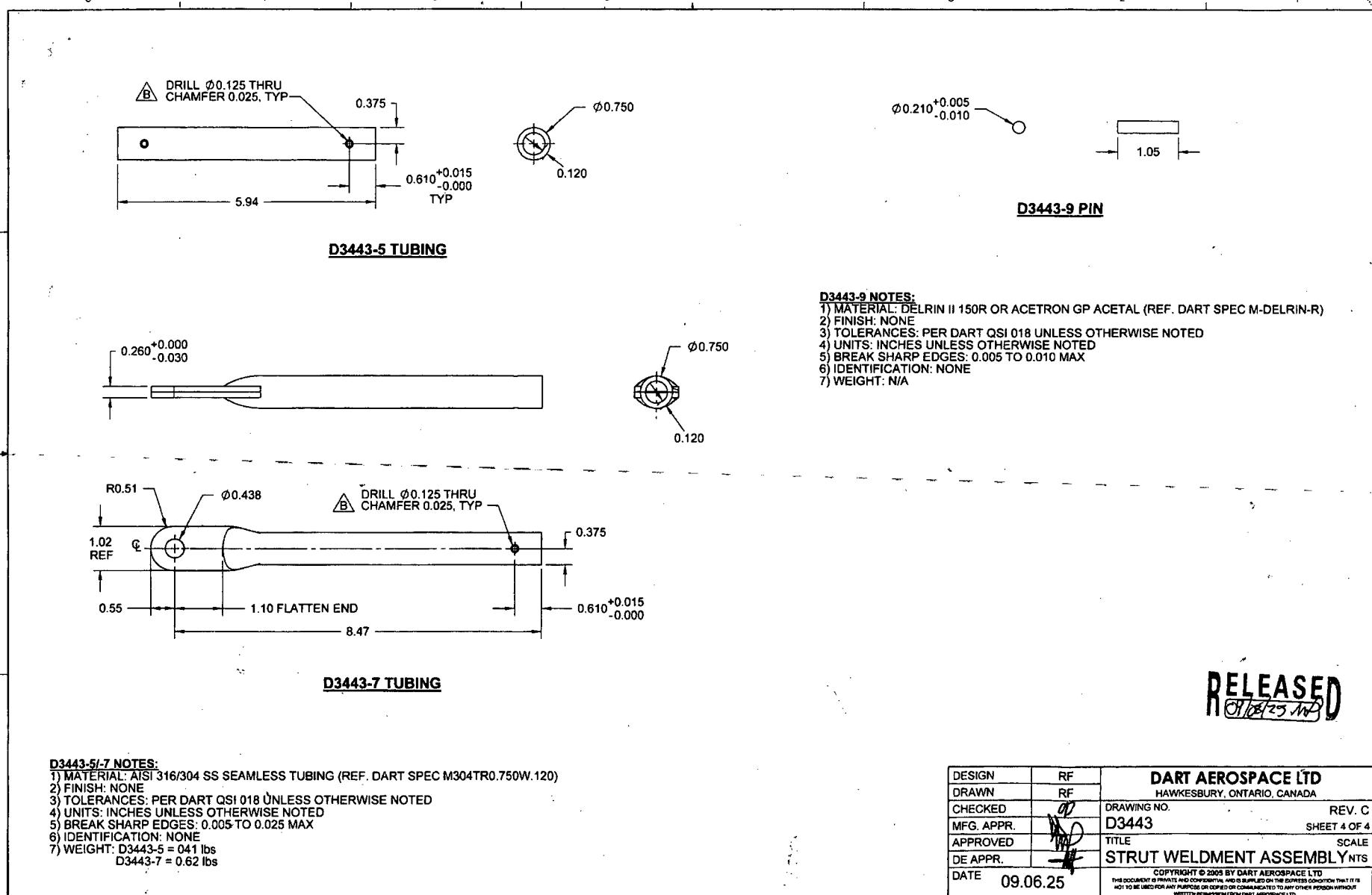
## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

## Work Order update only

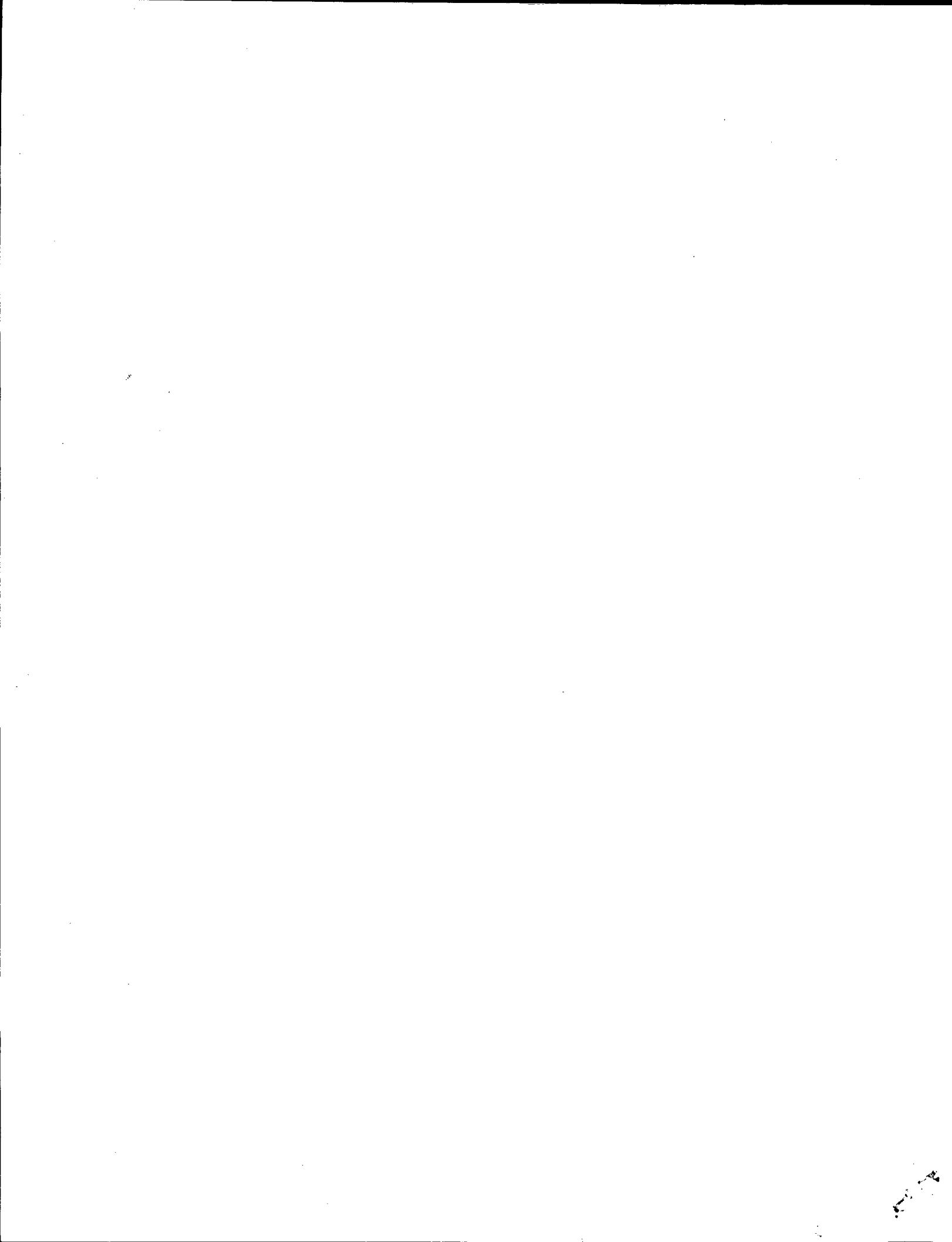




**D3443-5/7 NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.750W.120)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.025 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3443-5 = 0.41 lbs  
D3443-7 = 0.62 lbs

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DP	DRAWING NO.	REV. C
MFG. APPR.	W	D3443	SHEET 4 OF 4
APPROVED	W		TITLE
DE APPR.	W		SCALE
			STRUT WELDMENT ASSEMBLY NTS
		DATE 09.06.25	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD



DART AEROSPACE LTD

Work Order: 122 252

Description: Tubing

Part Number: A3443-7

Inspection Dwg:03443-1 Rev: C

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## FIRST ARTICLE INSPECTION CHECKLIST

Measured by: T.C. + J.H.C.

**Audited by:** D.A.

**Preliminary Approval:**

Date: 14/11/25

Date: 14 12 04 9-89

Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	<b>DISPOSITION</b> <input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved	<b>AGAINST DEPARTMENT/PROCESS</b> <input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other
Part No. _____		
NCR No. _____		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function		<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence						